

REMARKS

Upon entry of the present amendment, claim 9 will have been canceled, without prejudice and without disclaimer of the subject matter, and claims 1, 8, 10-13 and 15 will have been amended. Applicants respectfully submit that all pending claims are now in condition for allowance.

More particularly, claim 1 will have been amended to recite that the sub-flash device includes a receiver and a controller, which enable the sub-flash device to receive the at least two low flash emissions from the main flash device and to control the duration of the main-flash emission based on a time interval between two consecutive low flash emissions, which had been included in the subject matter of canceled claim 9. Claims 8 and 10-13 will have been amended to correct minor informalities in the claim language, to remove claim dependency on canceled claim 9, and to more clearly define the invention, while not narrowing the scope of these claims. Claim 15 will have been amended consistently with claim 1.

In the above-referenced Official Action, the Examiner withdrew his previous rejection of claims 1-6, 8 and 11-13 under 35 U.S.C. § 103(a) as being unpatentable over SASAKI (U.S. Patent No. 5,721,971) in response to Applicants' Reply under 37 C.F.R. § 1.111, filed February 10, 2003. The Examiner rejected claims 1-6 and 8-19 under 35 U.S.C. § 102(e) as being anticipated by FUKUI et al. (U.S. Patent No. 6,404,987). Applicants respectfully

traverse the rejection, at least for the reasons stated below.

Claim 1 has been amended to claim an embodiment of the invention in which a sub-flash device detects a time interval between two consecutive low flash emissions from the main flash device and controls the main-flash emission to emit light over a duration of time based on the detected time interval. In other words, the sub-flash device determines the duration through a main-flash emission command signal, which, in the uniform flash emission mode, comprises consecutive low flash emissions. For example, the duration may be determined by subtracting 2 milliseconds from the time interval between consecutive low flash emissions, and dividing the difference by 64 microseconds. See, e.g., page 161, lines 5-13; Fig. 27, steps S861-S864.

In comparison, the system disclosed in FUKUI et al. does not determine the duration of a main-flash emission by a sub-flash device, based on a time interval between two consecutive low flash emissions transmitted from a main flash as the main-flash emission control command. The Examiner asserted that the Fig. 11 of FUKUI et al. depicts two low flash emissions, each of which comprises numerous pulses (i.e., bits or data). The Examiner further asserted that the duration of the main-flash emission is based on the time intervals between these pulses, rather than the time interval between the low flash emissions. The Examiner characterizes the pulses as “sub-flashes,” which is not a term recited in any of the pending claims, in reference to the consecutive low flash emissions or otherwise.

Accordingly, by focusing on the contents of the low flash emissions instead of the low flash emissions themselves, the Examiner essentially admitted that FUKUI et al. do not teach determining duration of the main-flash emission based on the time interval between two consecutive low flash emissions.

Furthermore, even if the Examiner's asserted correlation between the low flash emissions recited in the present claims and the individual pulses within the low flash emissions of FUKUI et al. were appropriate, FUKUI et al. still do not teach or suggest basing the duration of the main-flash emission on a time interval between these pulses. Clearly, the pulses in FUKUI et al. represent "ones" and "zeros" to enable wireless binary data communication. For example, FUKUI et al. disclose sending control signals to a flash device using pulses as data bytes. "The pulses (or bits) D7 to D0 which are spaced at intervals of a predetermined distance after the channel discrimination signal form data of one byte." See col. 19, lines 55-58; Fig. 11. "The bits D7 to D0 correspond to the pulses D7 to D0 shown in Fig. 11." See col. 20, lines 45-46; Fig. 12.

Bits D2-D0 are specifically designated to show light emission time, but not based on time intervals between bits D2-D0. Rather, the light emission time is indicated by the values (ones or zeros) of bits T2, T1 and T0: "The light emission time can be indicated in eight different values by combining the three bits T2, T1 and T0." See col. 20, lines 52-55. The eight different values are derived from the three bits being different combinations of ones or

zeros (i.e., 2^3), which is basic binary computation. Therefore, the main-flash emission time in FUKUI et al. is based on the combined values of three binary numbers, not the time interval between the pulses.

Accordingly, because FUKUI et al. does not disclose each and every element of Applicants' claimed invention, as recited in independent claims 1 and 15, withdrawal of the rejections under 35 U.S.C., § 102(e) based on FUKUI et al. is respectfully requested. With regard to claims 2-6, 8 and 10-19, Applicants assert that they are allowable at least because they respectively depend from independent claims 1 and 15, which the Applicants submit have been shown to be allowable.

In view of the herein contained amendments and remarks, Applicants respectfully request reconsideration and withdrawal of previously asserted rejections set forth in the Official Action of April 23, 2003, together with an indication of the allowability of all pending claims, in due course. Such action is respectfully requested and is believed to be appropriate and proper.

Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attached thereto.

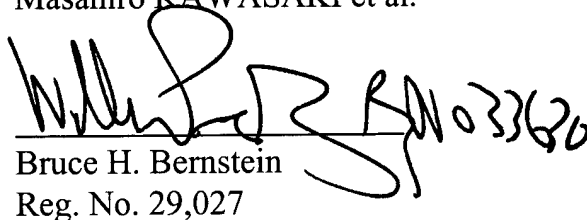
Applicants note the status of the present application as being an after final rejection and with respect to such status believes that there is a clear basis for the entry of the present amendment consistent with 37 C.F.R. § 1.116. Applicants note amendments after final are not entered as a matter of right; however, Applicants submit that the amendment made to the pending claims do not raise any new issues requiring further search or consideration, as features from claim 9 are being included in claim 1 and the claim language is being clarified and streamlined. It is also submitted that the present amendment does not raise the question of new matter. Moreover, the present amendment clearly places the present application in condition for allowance.

Accordingly, Applicants respectfully request entry of the present amendment in accordance with the provisions of 37 C.F.R. § 1.116, reconsideration and withdrawal of the outstanding rejections, and indication of the allowability of claims 1-6, 8 and 10-19 pending herein.

P21043.A04

Should the Examiner have any questions concerning this Amendment or the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,
Masahiro KAWASAKI et al.


Bruce H. Bernstein
Reg. No. 29,027

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GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191